Title: Gender Differences in Cancer Risk Perceptions: Results from the 2003 Health Information National Trends Survey (HINTS) (or) Examining Gender Differences in Cancer Risk Perceptions

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Research Question: Among male and female adult (50+ years old) respondents to the 2003 HINTS, what are their perceptions of risk for any cancer in their lifetime, gender-specific cancer risks (i.e., breast, prostate), and gender-neutral (i.e., lung, colorectal) cancer risks? Did respondents perceive greater susceptibility to gender-specific cancers compared to gender-neutral cancers? Are personal and family history of cancer, cancer worries, smoking status, preventive screening, and age significantly related to cancer risk perceptions? How do risk perceptions, cancer worries, and their associations with other covariates differ by gender and age?

Study description/Rationale: Perceived susceptibility is an important construct in many prominent theories of health behavior including the Health Belief Model[1,2] and the Protection Motivation Theory.[3-5] Thus, interventions target risk perceptions in order to increase behavioral compliance with health-related recommendations. While a great deal of research has demonstrated that female's risk perceptions and worries for breast cancer positively influence breast cancer screening rates,[6] less evidence exists for males regarding prostate cancer.[7] Additionally, past work suggests that women often perceive greater risks that men,[8,9] but little work has examined males and females in the same study and compared their responses across health outcomes.[10] Increasing age has not been significantly associated with perceptions of health risks among women,[11,12] but the relationship has not been demonstrated with national or male samples. The proposed analyses will provide a better understanding of the perceived risks of different forms of cancer and their association with other covariates both within and between gender groups, and whether the results differ by age.

Method of Analysis: Descriptive statistics such as means, standard deviations, frequencies and percentages with associated standard errors will be used to present the proportion in each perceived risk category by gender and age, as well as the percent screened for cancer, reporting personal or family history of cancer, and ever engaged in smoking. Analysis of variance will be used to examine between-group gender differences in risk perceptions for various forms of cancer, and repeated measures or paired t-tests will be used to examine within-group gender differences in risk perceptions across cancer types. Hierarchical regression analysis will be used to examine the percentage of variance in risk perceptions that can be accounted for by personal and family history of cancer, smoking status, and preventive screening experience, controlling for demographic factors.

HINTS 2003 Variables

Personal Risk

CK8ChanceGetCancer	How likely do you think it is that you will develop cancer in the future?
CK9WorryGetCancer	How often do you worry about getting cancer?
CK15CancerCauseMoreDeaths	Which type of cancer do you think will cause the most deaths in {men/women} this year in the US?

Cancer History

CH1EverHadCancer	Have you ever been told by a doctor that you had cancer?
CH2TyleofSpsCancer	What type of cancer was it, or in what part of the body did it start?
CH4TypeOfFamilyCancer	Have any of your brothers, sisters, parents, children, or other close family members ever had cancer?

Colon Cancer Perceived Risk

CC1ChanceColonCancer	How likely do you think it is that you will develop colon cancer in the future?
CC2RelativeChanceColonCancer	Compared to the average (man/woman) your age, would you say that you are…(more likely, less likely, or about as likely to get colon cancer)
CC3FreqWorryColonCancer	How often do you worry about getting colon cancer?

Other Cancer Perceived Risk by Gender

BC1ChanceBreastCancer	How likely do you think it is that you will develop breast cancer in the future?
BC2RelativeChanceBreastCancer	Compared to the average woman your age, would you say that you are…(more likely, less likely, or about as likely to get breast cancer)
BC3FreqWorryBreastCancer	How often do you worry about getting breast cancer?
PC1ChanceProstateCancer	How likely do you think it is that you will develop prostate cancer in the future?
PC2RelativeChanceProstateCancer	Compared to the average man your age, would you say that you are…(more likely, less likely, or about as likely to get prostate cancer)
PC3FreqWorryProstateCancer	How often do you worry about getting prostate cancer?

Other Cancer Screening by Gender

BC5HadMammogram	Have you ever had a mammogram?
BC6WhenMammogram	When did you have your most recent mammogram to check for breast cancer?
BC8MammogramLast6Years	How long before that mammogram was the last one?
CV1HadPapSmear	Have you ever had a Pap smear?
CV2WhenPapSmear	When did you have your most recent Pap smear to check for cervical cancer?
CV4PapSmearLast6Years	How long before that Pap smear was the last one?
PC5HadPSATest	Have you ever had a PSA test?
PC6WhenPSATest	When did you have your most recent PSA test to check for prostate cancer?
PC7PSALast5Years	How long before that PSA test was the last one?

Lung Cancer

TU16ChanceLungCancerSpecific	How likely do you think it is that you will develop lung cancer in the future?
TU1Smoke100	Have you smoked at least 100 cigarettes in your entire life?
TU2SmokeNow	Do you now smoke cigarettes…? (every day, some days, not at all)
TU6WhenQuitSmoke	About how long has it been since you last smoked cigarettes?

Demographics

DM1MainActivity	Are you currently…? (employed – unable to work)
DM2MaritalStatus	Are you…?
DM4Hispanic	Are you Hispanic or Latino?
DM5Race	Which one or more of the following would you say is your race? (5 options)
DM6Education	What is the highest grade or year of school you completed?
DM7	Annual household income from all sources? (8 levels)
SPGender	Are you male or female?

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